

## **Abstract**

**Melanoma skin cancer is a cancer that difficult to detect. In this study, have been done melanoma cancer classification using Convolutional Neural Network (CNN). CNN is a class of Deep Neural Network (Deep Learning) and commonly used to analyzing images data. A lot of data that used on CNN can greatly affect the accuracy. In this study, CNN architecture that used is ResNet. ResNet architecture model that used are ResNet 50, 40, 25, 10 and 7 models. The architecture trained using data train that has been augmented and undersampling. The validation result on each model calculated using F<sub>1</sub> Score. After validation and F<sub>1</sub> Score result from model obtained, the result compared each other to choose the best model. The best architecture was obtained is ResNet 50 wthout augmentation with 0.83 validation accuracy and 0.46 f1 score.**

**Keywords: ResNet, augmentasi data, dropout, fully-connected layer**